## INTERNATIONAL SEARCH REPORT

International Application No PCT/US 02/24102

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C03B35/18 B21B39/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

 $\begin{array}{ccc} \text{Minimum documentation searched (classification system followed by classification symbols)} \\ IPC & 7 & C03B & B21B \end{array}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 195 04 044 A (PROMAT GMBH) 7 September 1995 (1995-09-07) page 3, line 7 - line 60; figures	1-3,8, 10,11, 13,17, 20-29
A	EP 0 473 926 A (ELTECH SYSTEMS CORP) 11 March 1992 (1992-03-11) cited in the application column 17, line 33 - line 49	1-29
Α	US 4 167 997 A (REVELLS ROBERT G) 18 September 1979 (1979-09-18) column 4, line 64 - line 56	1-29
A	US 3 807 982 A (CLAASSEN G ET AL) 30 April 1974 (1974-04-30) the whole document	1-29

Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
<ul> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but</li> </ul>	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
23 January 2003	30/01/2003
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer
NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Reedijk, A

## IINTERIVATIONAL SEARON REPORT

International Application No PCT/US 02/24102

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	US 4 459 148 A (DIEDEREN WERNER ET AL) 10 July 1984 (1984-07-10) column 4, line 1 - line 65; figure	1-29
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